

**Claim Amendments Filed 03/08/05 with Response to Office Action mailed by
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Claim 1 (Previously presented): A fiber laser system, comprising:
 an energy source;
 a first fiber coupled to the energy source so that pump energy from the
energy source can be transferred to the first fiber;
 a second fiber, said second fiber comprising a loop;
 a WDM capable of transferring the pump energy from the first fiber to the
second fiber; and
 said loop of said second fiber comprising a fiber Bragg grating capable of
substantially reflecting energy at a wavelength, wherein the first fiber is devoid of a
reflector substantially reflecting energy at the wavelength.

Claim 2 (Canceled)

Claim 3 (Original): The system of claim 1, wherein the second fiber is in the shape of a
circular loop.

Claim 4 (Previously presented): The system of claim 1, wherein the wavelength
comprises energy having a Stoke shifted wavelength.

Claim 5 (Original): The system of claim 4, wherein the Stoke shifted wavelength has
an order greater than one.

Claim 6 (Original): The system of claim 5, wherein the order is two.

Claim 7 (Original): The system of claim 5, wherein the order is three.

Claim 8 (Original): The system of claim 5, wherein the order is four.

Claim 9 (Original): The system of claim 5, wherein the order is five.

Claim 10 (Previously presented): The system of claim 1, further comprising a second fiber Bragg grating in the second fiber, the second fiber Bragg grating being capable of substantially reflecting energy at a second wavelength different than the wavelength, wherein the first fiber is devoid of a fiber Bragg grating capable of substantially reflecting energy at the second wavelength.

Claim 11 (Previously presented): The system of claim 1, further comprising: a third fiber, a second WDM, and a second fiber Bragg grating being capable of substantially reflecting energy at a second wavelength different than the wavelength, the second fiber grating being in the third fiber, the second WDM being capable of transferring pump energy between the first and third fibers.

Claim 12 (Original): The system of claim 11, wherein the third fiber is in the shape of a loop.

Claim 13 (Original): The system of claim 11, wherein the third fiber is in the shape of a circular loop.

Claim 14 (Previously presented): The system of claim 11, wherein the second wavelength comprises energy having a Stoke shifted wavelength.

Claim 15 (Original): The system of claim 11, further comprising a third fiber Bragg grating capable of substantially reflecting the pump energy, the third fiber Bragg grating being in the first fiber.

Claim 16 (Original): The system of claim 15, wherein the second WDM is between the energy source and the third fiber Bragg grating.

Claim 17 (Previously presented): The system of claim 1, further comprising a second

fiber Bragg grating capable of substantially reflecting the pump energy, the second fiber Bragg grating being in the first fiber.

Claim 18 (Original): The system of claim 17, wherein the WDM is between the energy source and the second fiber Bragg grating.

Claim 19 (Previously presented): The system of claim 1, further comprising a coupler and a third fiber, the coupler being capable of transferring energy having the wavelength from the second fiber to the third fiber.

Claim 20 (Previously presented): The system of claim 19, further comprising a second fiber Bragg grating in the third fiber, the second fiber Bragg grating being capable of substantially reflecting the energy having the wavelength.

Claim 21 (Currently amended): A fiber laser system, comprising:

- an energy source capable of producing pump energy;
- a fiber coupled to the energy source so that the pump energy can be transferred from the energy source to the fiber, the fiber having a loop-shaped portion, a first non loop-shaped portion, and a second non loop-shaped portion;
- a first fiber Bragg grating in the first non loop-shaped portion of the fiber, the first fiber Bragg grating being capable of substantially reflecting ~~the pump energy~~ comprising a Stoke shifted wavelength;
- a second fiber Bragg grating in the second non loop-shaped portion of the fiber, the second fiber Bragg grating being capable of substantially reflecting energy having a wavelength comprising ~~a~~ the Stoke shifted wavelength.

Claim 22 (Original): The system of claim 21, further comprising a third fiber Bragg grating in the second non-loop shaped portion of the fiber, the third fiber Bragg grating being capable of substantially reflecting energy having a wavelength comprising a second Stoke shifted wavelength.

Claim 23 (Currently amended): The system of claim 22, further comprising a fourth fiber Bragg grating in the second non loop-shaped portion of the fiber, the ~~third~~fourth fiber Bragg grating being capable of substantially reflecting energy having a wavelength comprising a third Stoke shifted wavelength.

Claim 24 (Previously presented): The system of claim 21, further comprising a coupler and a second fiber, the coupler being capable of transferring energy having a first wavelength from the first fiber to the second fiber.

Claim 25 (Previously presented): The system of claim 24, wherein the first wavelength comprises the Stoke shifted wavelength.

Claim 26 (Currently amended): The system of claim ~~23~~21, wherein the ~~predetermined energy has a wavelength comprising the Stoke shifted wavelength~~ first Bragg grating is capable of substantially reflecting the pump energy.

Claim 27 (Canceled)

Claim 28 (Canceled)

Claim 29 (Previously presented): A fiber laser system, comprising:
an energy source capable of producing pump energy;
a fiber coupled to the energy source so that the pump energy from the energy source can be transferred to the fiber;
a first pair of fiber Bragg gratings in the fiber, the gratings in the first pair being capable of substantially reflecting energy at a first wavelength corresponding to a first order Stoke shifted energy;
a second pair of gratings in the fiber, the gratings in the second pair being capable of substantially reflecting energy at a second wavelength corresponding to an order of Stoke shifted energy that is greater than one; and

a third pair of gratings in the fiber, the gratings in the third pair being capable of substantially reflecting energy at a third wavelength corresponding to an order of Stoke shifted energy that is greater than the second wavelength, wherein no grating of the third pair is located between the gratings of the second pair.

Claim 30 (Previously presented): The system of claim 1 wherein said first fiber is non-loop shaped.

Claim 31 (Currently amended): The system of claim 1 wherein the wavelength comprises energy having a Stoke shifted wavelength, and wherein said WDM transfers substantially no energy at said Stoke shifted wavelength from said second fiber to said first fiber and transfers substantially no energy at a different Stoke shifted wavelength having a different order than said Stoke shifted wavelength from said second fiber to said first fiber.

Claim 32 (Previously presented): The system of claim 1 wherein said first fiber being devoid of said reflector includes said first fiber being devoid of said reflector between said energy source and said WDM.

Claim 33 (New): A fiber laser system, comprising:
an energy source capable of producing pump energy;
a fiber coupled to the energy source so that the pump energy can be transferred from the energy source to the fiber, the fiber having a loop-shaped portion, a first non loop-shaped portion, and a second non loop-shaped portion;
a first fiber Bragg grating in the first non loop-shaped portion of the fiber, the first fiber Bragg grating being capable of substantially reflecting the pump energy;
a second fiber Bragg grating in the second non loop-shaped portion of the fiber, the second fiber Bragg grating being capable of substantially reflecting energy having a wavelength comprising a Stoke shifted wavelength; and
a third fiber Bragg grating in the second non loop-shaped portion of the fiber, the third fiber Bragg grating being capable of substantially reflecting energy having

a wavelength comprising a second Stoke shifted wavelength.

Claim 34 (New): The system of claim 33 further comprising a fourth fiber Bragg grating in the second non loop-shaped portion of the fiber, the fourth fiber Bragg grating being capable of substantially reflecting energy having a wavelength comprising a third Stoke shifted wavelength.